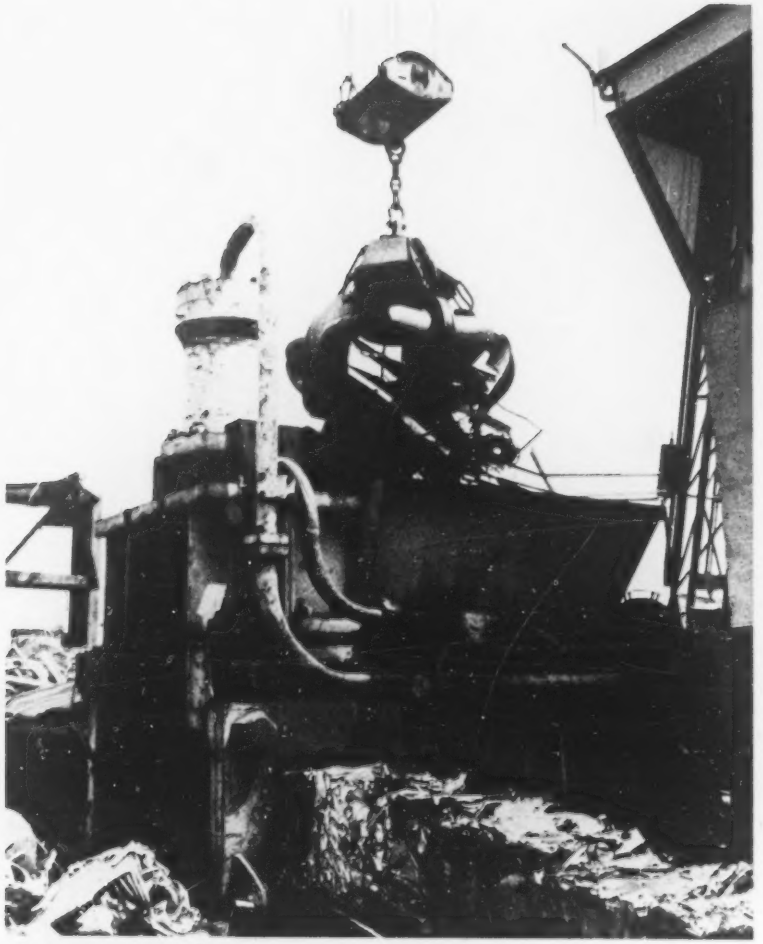
FACTS



Institute of Scrap Iron and Steel, Inc.
Representing America's Processors of Metallic Scrap for Recycling.
1984 Yearbook • 42nd Edition

The Institute

The Institute of Scrap Iron and Steel, Inc., founded in 1928, is a national association of approximately 1250 firms—predominantly processors and brokers of ferrous and nonferrous scrap. These firms handle, process and/or ship approximately 95 percent of all purchased ferrous scrap consumed in the U.S. or exported. Member companies also include consumers of scrap metals and suppliers to the industry.

A scrap metal processor is defined as one, who, from a fixed location, utilizes machinery and equipment for processing and manufacturing iron, steel or nonferrous metallic scrap into prepared grades and whose principal product is scrap iron, scrap steel or nonferrous metallic scrap for remelting purposes.

Facts
42nd Edition
1984 Yearbook

Copyright © 1986
Institute of Scrap Iron and Steel, Inc.
1627 K Street, N.W.
Washington, DC 20006
202-466-4050

Price: $5.00

Contents

Facts summary 3
Ferrous scrap consumption, purchased scrap receipts and home scrap production 4
Raw steel production, steel mill and foundry castings shipments 5
Trend of U.S. steel production by furnace 5
Purchased scrap receipts, home scrap consumption and ferrous scrap consumption by grade 6
U.S. consumption of ferrous scrap and blast furnace iron (BFI) by type of furnace 6
Iron ore consumption 7
Iron ore imported for consumption .. 7
Iron ore mined domestically 7
U.S. exports of carbon steel and iron scrap 8
U.S. exports of ferrous scrap by country 8
U.S. exports of ferrous scrap by grade 9
U.S. imports of ferrous scrap, iron ore, pig iron and steel products 9
No. 1 heavy melting steel scrap composite price 10
No. 2 bundles composite price 10
Finished steel composite price 10

Note: All tonnage figures are in net (short) tons which equal 2,000 pounds. Scrap price tables are based on gross (long) tons equal to 2,240 pounds.

Monthly figures may not add to annual totals due to rounding or sampling differences.

Publications

"ISIS Handbook Including Specifications for Iron and Steel Scrap" ($7.00)
"Metallic Scrap—The Manufactured Resource"
"Scrap in Iron and Steelmaking"
Phoenix Quarterly: To be placed on the complimentary mailing list to receive the Institute's award winning public interest periodical, write the Institute giving your full address. Recent issues on the following subjects are available:
China Seeks Cooperation
Scrap Processing Capacity
Recycling and Hazardous Waste
Steel Industry Adversity
Steel and Scrap in 1985
Ferrous Scrap Backlog
Garbage and Flow Control
Can Steel Get Into Shape
New Players in International Steel
Scrap in Space
Scrap Processing Equipment
Scrap in the Third World
Continuous Cast Steelmaking
"Steel Day"
How the Scrap Market Functions
Recycling America's Railroads
Recycling Automobile Blocks
Industrial Auto Scrap
Sodium Azide and Air Bags

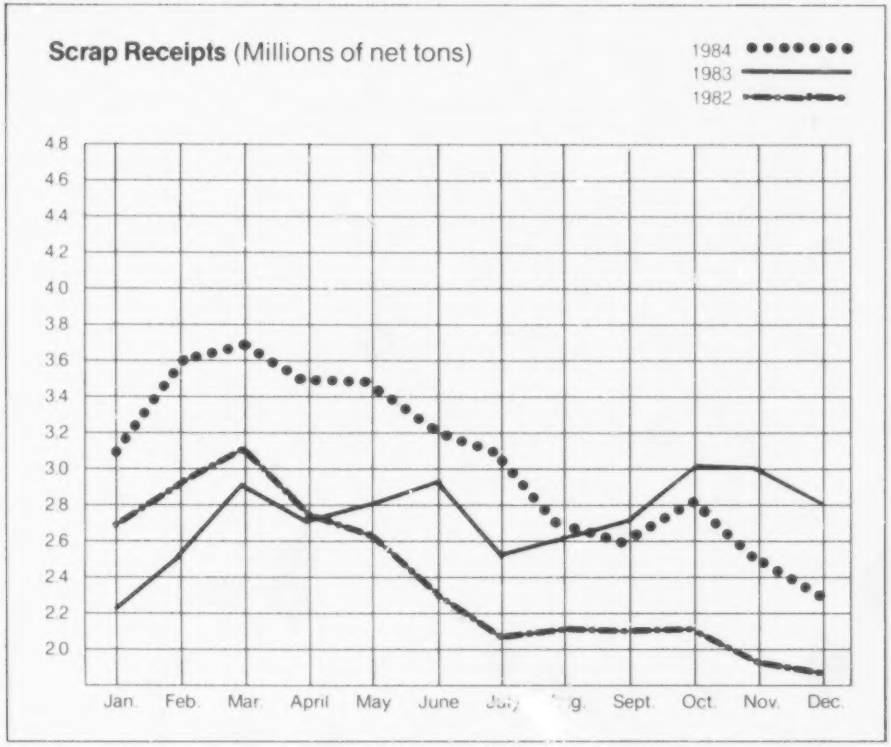
Facts

Summary

		1964	1974	1980	1981	1982	1983	1984
Ferrous Scrap for Recycling Purchased domestically by[1]	Steel Mills	NA	34.6	29.3	30.2	19.0	24.8	26.7
	Foundries	NA	16.7	11.7	11.8	9.0	9.4	9.3
	Total	**36.7**	**51.3**	**41.0**	**42.0**	**28.0**	**34.2**	**36.1**
Home Scrap Produced in[1]	Steel Mills	44.8	47.4	37.0	38.4	23.5	23.9	24.7
	Foundries	7.5	7.8	5.2	4.8	3.6	3.4	4.6
	Total	**52.3**	**55.3**	**42.2**	**43.3**	**27.1**	**27.2**	**29.3**
Purchased & Home Scrap consumed by[1]	Steel Mills	67.3	81.1	66.6	68.3	43.7	49.0	51.8
	Foundries	17.3	24.4	17.1	16.8	12.7	12.8	13.9
	Total	**84.6**	**105.5**	**83.7**	**85.1**	**56.4**	**61.8**	**65.7**
Exported (Includes purchased & home)[5]	Carbon	7.89	8.46	10.86	6.24	6.56	7.37	9.24
	Stainless	**	0.04	0.12*	0.06	0.13	0.08	0.16
	Alloy	**	**	0.19	0.11	0.11	0.07	0.10
Prices (Composite, yearly average in dollars per gross ton)[2]	No. 1 Heavy Melting	33.67	108.51	91.35	91.53	63.35	73.90	86.12
	No. 2 Bundles	22.69	58.03	63.71	64.31	45.05	48.80	55.84
Iron Ore[1]	Mined domestically	95.0	94.5	78.0	83.2	40.9	42.5	57.4
	Imported	47.5	53.8	28.1	31.7	16.4	14.9	19.2
	Blast furnace iron consumed	86.4	96.8	69.1	75.0	44.4	50.1	53.2
Ferrous Production	Raw Steel Production[3]	127.1	145.7	111.8	120.8	74.6	84.6	91.5
	Steel Mill Shipments[3]	84.9	109.5	83.9	88.5	61.6	67.6	73.0
	Ferrous Foundries—Castings Shipments[4]	17.2	18.7	14.1	14.0	9.5	10.2	11.9
Finished Steel Composite Price[2] (yearly average, cents-per-pound)		6.368	11.141	21.655	24.224	25.271	26.190	27.313
Steel Production[3] by type of furnace and percent of total output	Basic Oxygen Furnace	15.4	81.6	67.6	73.2	45.3	52.1	52.8
	Percent	**12.2%**	**56.0%**	**60.4%**	**60.6%**	**60.7%**	**61.5%**	**57.1%**
	Electric	12.7	28.7	31.2	34.1	23.2	26.6	31.4
	Percent	**10.0%**	**19.7%**	**27.9%**	**28.3%**	**31.1%**	**31.5%**	**33.9%**
	Open Hearth	98.1	35.5	13.1	13.5	6.1	6.0	8.3
	Percent	**77.2%**	**24.3%**	**11.7%**	**11.1%**	**8.2%**	**7.0%**	**9.0%**
Ferrous Scrap Consumption by Furnace (purchased & home)[1]	Basic Oxygen	5.5	26.6	21.9	23.3	14.1	16.2	16.4
	Blast	4.8	4.6	3.7	4.0	2.6	3.1	2.7
	Cupola	13.4	15.6	9.4	9.1	7.3	7.7	8.5
	Electric	14.9	37.5	40.2	39.6	27.8	30.6	33.4
	Open Hearth	43.9	19.2	7.4	7.5	3.6	3.3	3.7
	Other	2.2	2.0	1.2	1.5	1.0	0.9	1.1

Sources
[1]U.S. Bureau of Mines (in millions of net tons)
[2]*Iron Age*
[3]American Iron & Steel Institute (in millions of net tons)
[4]U.S. Bureau of Census (in millions of net tons)
[5]Pre-1976 U.S. Bureau of Mines, post-1975 U.S. Bureau of Census
*Preliminary
**Not reported separately; included in carbon

Ferrous scrap consumption, purchased scrap receipts and home scrap production—thousands of net tons



Year	Total U.S. Scrap Consumed	Purchased Scrap Receipts	Home Scrap Production
1975	82,331	36,753	46,042
1976	89,910	41,399	50,025
1977	92,198	41,933	49,517
1978	99,224	46,068	52,082
1979	98,901	46,963	52,219
1980	83,710	40,954	42,207
1981	85,097	41,981	43,260
1982	56,386	27,994	27,127
1983	61,782	34,219	27,247
1984	65,702	36,060	29,276

Source: U.S. Bureau of Mines

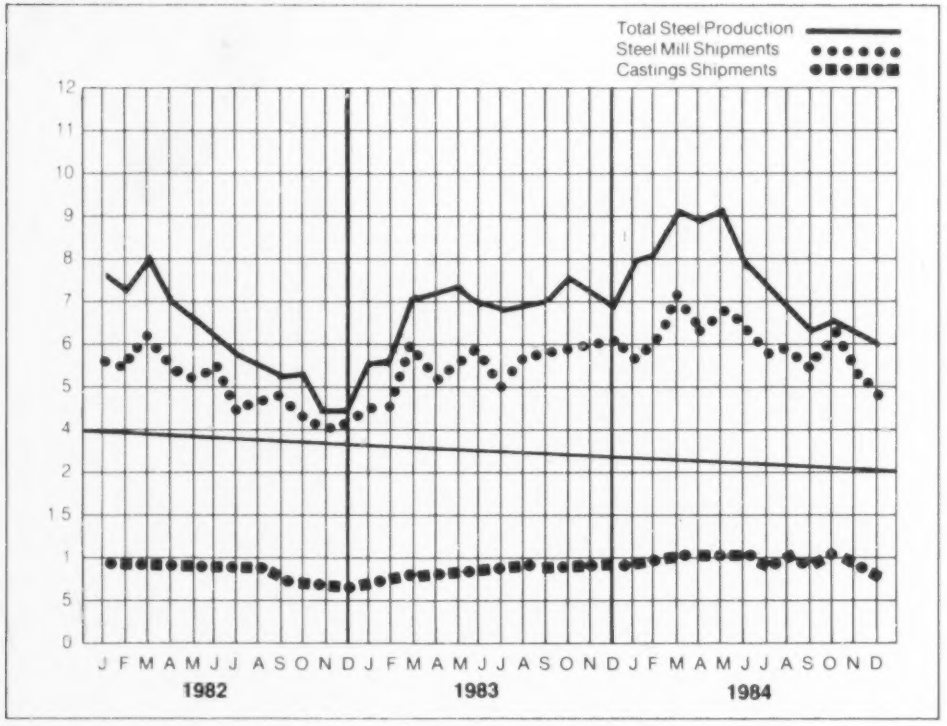
The 36 million net tons of ferrous scrap purchased by domestic steel mills and foundries in 1984 represent a 5% improvement over the prior year.

Scrap demand exceeded 3 million net tons for each of the first 7 months of 1984, a monthly level achieved only once during 1983. By December, activity dropped to its lowest for any month in 1984. According to the U.S. Bureau of Mines, monthly data reflect responses from as few as 52% and as many as 78% of companies surveyed and annual 1984 scrap consumption may be understated by as much as 8.6 million net tons.

Steel production in 1984 increased by 8.2%, steel mill shipments rose 8.0% and castings shipments expanded by 16.7% when compared to 1983 volumes.

Month	Total U.S. Scrap Consumption	Purchased Scrap Receipts	Home Scrap Production
1982			
January	5,917	2,715	2,742
February	5,615	2,889	2,753
March	6,180	3,114	3,019
April	5,391	2,779	2,597
May	5,077	2,611	2,418
June	4,715	2,303	2,320
July	4,336	2,033	2,119
August	4,377	2,133	2,122
September	4,357	2,106	2,078
October	4,225	2,134	1,975
November	3,757	1,924	1,773
December	3,611	1,865	1,687
1983			
January	4,257	2,223	1,832
February	4,396	2,488	1,877
March	5,157	2,913	2,395
April	5,029	2,723	2,247
May	5,233	2,817	2,376
June	5,098	2,859	2,286
July	4,775	2,529	2,181
August	5,009	2,620	2,368
September	5,111	2,700	2,409
October	5,545	2,988	2,467
November	5,375	3,008	2,428
December	5,087	2,804	2,247
1984			
January	5,709	3,128	2,442
February	5,932	3,592	2,499
March	6,460	3,730	2,866
April	6,256	3,476	2,734
May	6,393	3,470	2,856
June	5,820	3,157	2,633
July	5,662	3,089	2,510
August	5,143	2,732	2,376
September	4,897	2,615	2,144
October	5,197	2,844	2,323
November	4,662	2,473	2,085
December	4,305	2,268	1,988

Raw steel production, steel mill and foundry castings shipments—millions of net tons



Trend of U.S. steel production by furnace—millions of net tons and by perecentage[1]

	Basic Oxygen		Electric		Open Hearth	
Year	Tons	%	Tons	%	Tons	%
1975	71.8	61.6%	22.7	19.4%	22.2	19.0%
1976	79.9	62.5%	24.6	19.2%	23.5	18.3%
1977	77.4	61.8%	27.9	22.2%	20.0	16.0%
1978	83.5	60.9%	32.2	23.5%	21.3	15.6%
1979	83.3	61.1%	33.9	24.9%	19.2	14.0%
1980	67.6	60.4%	31.2	27.9%	13.1	11.7%
1981	73.2	60.6%	34.1	28.3%	13.5	11.1%
1982	45.3	60.7%	23.2	31.1%	6.1	8.2%
1983	52.1	61.5%	26.6	31.5%	6.0	7.0%
1984	52.8	57.1%	31.4	33.9%	8.3	9.0%

1. Calculated as a percentage of total steel production.
Source: American Iron and Steel Institute

Year	Total Steel Production	Steel Mill Shipments	Castings Shipments[1]
1975	116.6	80.0	16.1
1976	128.0	89.4	17.8
1977	125.3	91.1	18.5
1978	137.0	97.9	18.8
1979	136.3	100.3	18.2
1980	111.8	83.9	14.1
1981	120.8	88.5	14.0
1982	74.6	61.6	9.5
1983	84.6	67.6	10.2
1984	91.5	73.0	11.9

1. Data sample revised beginning 1975.
Source: for steel data, American Iron and Steel Institute; for castings, U.S. Bureau of the Census

Month	Total Steel Production	Steel Mill Shipments	Castings Shipments[1]
1982			
January	7,737	5,608	930
February	7,178	5,433	919
March	8,049	6,163	896
April	7,006	5,488	847
May	6,678	5,149	841
June	6,050	5,372	829
July	5,719	4,514	801
August	5,538	4,724	763
September	5,299	4,760	727
October	5,262	4,309	648
November	4,546	4,088	668
December	4,456	4,234	606
1983			
January	5,570	4,583	707
February	5,676	4,588	726
March	7,127	5,969	763
April	7,292	5,399	790
May	7,412	5,612	847
June	6,993	5,986	849
July	6,921	5,045	894
August	7,020	5,789	969
September	7,134	5,893	938
October	7,692	6,078	925
November	7,263	6,014	903
December	6,991	6,269	969
1984			
January	7,970	5,980	992
February	8,142	6,150	1,001
March	9,056	7,240	1,035
April	8,997	6,472	1,031
May	9,174	6,948	1,112
June	7,945	6,686	1,043
July	7,460	5,820	913
August	6,915	6,033	1,084
September	6,378	5,454	959
October	6,703	6,087	1,125
November	6,422	5,317	910
December	6,013	4,867	732

Purchased scrap receipts, home scrap production and ferrous scrap consumption by grade—thousands of net tons

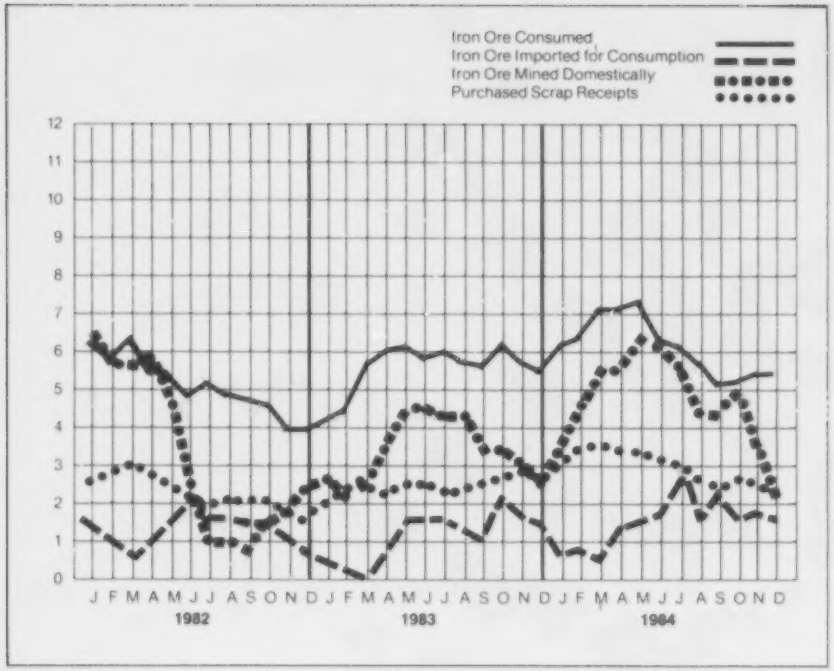
Total—All Types of Manufacturers	1982 Purchased Scrap Receipts[1]	1982 Home Scrap Production	1982 Total Scrap Consumed	1983 Purchased Scrap Receipts[1]	1983 Home Scrap Production	1983 Total Scrap Consumed	1984 Purchased Scrap Receipts[1]	1984 Home Scrap Production	1984 Total Scrap Consumed
GRADE OF SCRAP									
Carbon steel:									
Low-phosphorous plate and punchings	1,378	254	1,591	1,261	202	1,434	1,185	440	1,550
Cut structural and plate	1,998	422	2,563	2,132	387	2,549	2,163	470	2,696
No. 1 heavy melting steel	5,383	8,430	14,134	7,439	8,633	16,083	8,539	8,781	17,386
No. 2 heavy melting steel	1,384	784	2,384	2,022	721	2,777	2,198	693	2,894
No. 1 and electric furnace bundles	4,105	1,623	6,123	5,969	2,054	7,999	6,211	1,930	8,457
No. 2 and all other bundles	1,051	15	1,227	1,094	7	1,174	1,226	8	1,257
Electric furnace 1 foot and under (not bundles)	208	19	233	239	17	249	118	5	119
Railroad rails	187	9	215	257	15	340	227	8	369
Turnings and borings	1,095	206	1,373	895	157	1,107	1,187	186	1,402
Slag scrap (Fe content 70%)	407	2,595	2,929	603	2,671	3,097	445	3,932	3,292
Shredded or fragmentized	2,721	56	2,893	3,047	51	3,137	4,096	32	4,248
No. 1 busheling	1,029	125	1,223	1,685	215	1,974	1,620	213	1,916
All other carbon steel scrap	2,299	6,364	8,333	2,214	6,071	8,283	1,995	6,264	8,022
Stainless steel scrap	406	362	782	480	523	1,005	549	491	1,058
Alloy steel (except stainless)	181	1,022	1,187	180	1,000	1,252	283	1,158	1,454
Ingot mold scrap	114	1,573	1,822	271	1,520	1,837	390	1,537	1,828
Machinery and cupola cast iron	884	355	1,212	808	253	992	830	379	1,162
Cast iron borings	613	261	940	906	167	1,165	1,060	178	1,202
Motor blocks	518	356	784	811	364	1,097	386	711	1,107
Other iron scrap	936	1,814	2,837	810	1,408	2,275	724	2,460	3,296
Other scrap	1,099	483	1,601	1,097	809	1,957	578	398	986
Total scrap[2]	**27,994**	**27,127**	**56,386**	**34,219**	**27,247**	**61,782**	**36,060**	**29,276**	**65,702**

1 Receipts less shipments
2 Data may not add to totals because of independent rounding
Source: U.S. Bureau of Mines

U.S. consumption of ferrous scrap and blast furnace iron (BFI) by type of furnace—thousands of net tons

Year	Basic Oxygen Scrap	Basic Oxygen BFI	Blast Scrap	Cupola Scrap	Cupola BFI	Electric Scrap	Electric BFI	Open Hearth Scrap	Open Hearth BFI	Other Scrap	Other BFI	Total Consumed Scrap	Total Consumed BFI
1975	23,392	59,210	3,931	11,749	1,362	29,850	1,019	11,780	14,554	1,629	3,493	82,331	79,638
1976	26,204	66,138	3,692	13,341	1,197	32,301	638	12,337	15,410	2,035	3,661	89,910	87,045
1977	25,034	63,877	3,771	14,325	1,241	36,414	993	11,087	12,531	1,567	3,361	92,198	82,003
1978	26,006	69,028	4,185	14,077	1,056	41,289	1,440	11,768	13,444	1,899	3,453	99,224	88,420
1979	26,496	68,526	4,117	12,774	1,026	43,555	905	10,478	12,865	1,481	4,135	98,901	87,457
1980	21,859	56,414	3,651	9,440	698	40,154	855	7,445	8,606	1,160	2,481	83,710	69,053
1981	23,278	62,162	4,046	9,113	685	39,642	583	7,498	8,867	1,520	2,743	85,097	75,040
1982	14,059	38,553	2,648	7,328	481	27,794	496	3,588	3,635	970	141	56,386	44,409
1983	16,219	44,330	3,125	7,655	425	30,619	341	3,275	3,918	888	1,056	61,782	50,070
1984	16,447	45,551	2,724	8,460	469	33,405	370	3,724	5,718	1,094	92	65,702	53,202

Source: U.S. Bureau of Mines



Iron Ore Consumption—Millions of net tons

Month	1982	1983	1984
January	6.2	4.3	6.2
February	5.8	4.5	6.4
March	6.4	5.8	7.2
April	5.5	6.1	7.2
May	5.5	6.2	7.3
June	4.9	5.9	6.3
July	5.3	6.1	6.2
August	4.9	5.9	5.8
September	4.8	5.8	5.1
October	4.7	6.3	5.3
November	4.1	5.9	5.5
December	4.0	5.7	5.5

Source: U.S. Bureau of Mines

Iron Ore Imported for Consumption—Millions of net tons

Month	1982	1983	1984
January	1.8	0.5	0.7
February	1.1	0.4	0.9
March	0.7	0.2	0.5
April	0.9	0.6	1.4
May	1.3	1.4	1.6
June	2.1	1.6	1.8
July	1.7	1.7	2.8
August	1.7	1.6	1.7
September	1.6	1.2	2.5
October	1.6	2.2	1.7
November	1.0	1.8	1.9
December	0.9	1.7	1.7

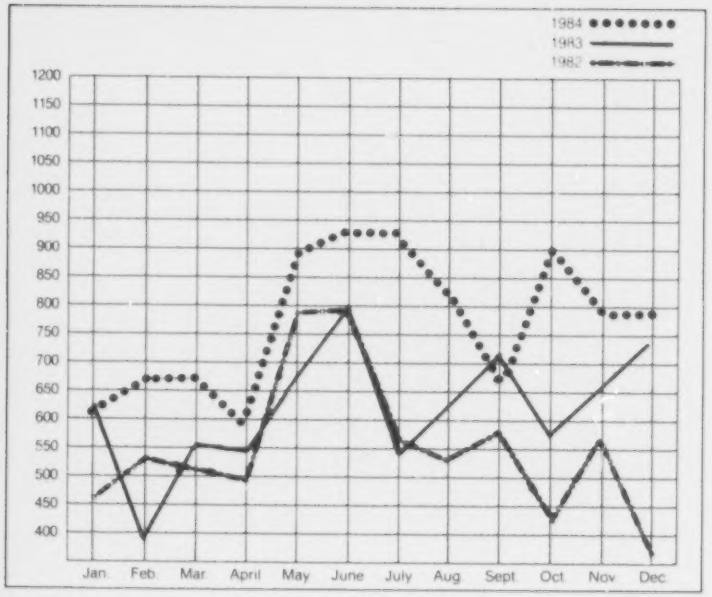
Source: U.S. Bureau of Mines

Iron Ore Mined Domestically—Millions of net tons

Month	1982	1983	1984
January	6.4	2.8	3.5
February	5.9	2.2	4.8
March	5.8	2.6	5.5
April	6.0	3.5	5.5
May	4.9	4.5	6.4
June	2.8	4.8	6.2
July	1.0	4.5	5.8
August	1.0	4.5	4.5
September	0.8	3.6	4.4
October	1.6	3.6	5.0
November	1.9	3.1	3.7
December	2.6	2.9	2.2

Source: U.S. Bureau of Mines

U.S. exports of carbon steel and iron scrap—thousands of net tons



U.S. Exports of Carbon Steel and Scrap—Thousands of net tons Month	1982	1983	1984
January	451	615	611
February	528	360	654
March	501	550	659
April	488	544	589
May	770	666	884
June	781	790	935
July	559	548	935
August	527	614	829
September	569	713	676
October	424	566	889
November	605	658	785
December	359	745	786

Source: U.S. Department of Commerce

U.S. exports of ferrous scrap[1] by country[2]—thousands of net tons

Country	1980	1981	1982	1983	1984
Canada	790	737	289	539	779
Mexico	1,125	897	372	419	484
China	—	—	1	1	200
India	92	335	415	278	201
Italy	892	34	12	65	306
Japan	2,838	1,191	1,448	2,600	2,680
Korean Rep	1,736	1,241	1,491	1,476	1,833
Peru	11	20	12	35	198
Spain	1,139	434	855	356	608
Taiwan	990	374	313	493	405
Turkey	318	364	639	700	807
Venezuela	23	55	45	20	392

1. Includes all grades.
2. Canada and Mexico plus ten largest importing countries in current year; dash means separate total not available.

Source: U.S. Department of Commerce

U.S. exports of ferrous scrap by grade—thousands of net tons

Grade	1980	1981	1982	1983	1984
Alloy steel scrap[1]	186	108	110	70	100
Stainless steel scrap[1]	118	63	131	80	164
No. 1 heavy melting scrap	2,907	1,606	1,883	1,895	2,512
No. 2 heavy melting scrap	1,067	618	626	720	879
No. 1 baled steel scrap	119	41	115	206	77
No. 2 baled steel scrap	314	273	181	220	286
Shredded steel scrap	3,323	1,923	2,023	2,029	2,775
Borings, shovelings and turnings	769	486	577	532	800
Other steel scrap[2]	1,575	796	768	1,445	1,316
Iron scrap	783	501	389	322	590
Iron and steel scrap	10,857	6,244	6,563	7,369	9,235

1. Subject to revision for 1980.
2. Includes terneplate and tinplate.
Source: U.S. Department of Commerce.

A 25 percent improvement in carbon steel scrap export volume brought annual 1984 shipments to 9.2 million net tons, a level amounting to only 85% of 1980's healthier performance. Alloy steel scrap exports rose 43% to 100,000 tons and stainless steel scrap exports more than doubled.

Highest monthly carbon steel scrap activity was 935,000 tons in both June and July. In 1984, the monthly export average was 770,000 tons compared to 615,000 in 1983.

Japan remained the leading importer of American ferrous scrap. In order of magnitude Korea, Turkey, Canada, Spain, Mexico, Taiwan, Venezuela, Italy, India, China and Peru were the year's significant purchasers.

U.S. imports of ferrous scrap, iron ore, pig iron and steel products—millions of net tons

Year	Scrap[1]	Iron Ore	Pig Iron	Steel
1975	0.3	52.4	0.5	12.5
1976	0.5	49.7	0.4	15.0
1977	0.6	42.5	0.4	19.9
1978	0.8	37.6	0.7	22.0
1979	0.8	37.8	0.5	17.5
1980	0.6	28.1	0.5	15.5
1981	0.6	31.7	0.5	19.9
1982	0.5	16.4	0.3	16.7
1983	0.6	14.9	0.2	17.1
1984	0.6	19.2	0.7	26.2

1. Includes tinplate.
Source: U.S. Bureau of Mines, for steel; American Iron and Steel Institute.

No. 1 heavy melting steel scrap composite price[1]—dollars per gross ton

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
1984	$ 92.70	$ 94.92	$ 91.25	$ 90.17	$ 89.08	$ 85.17	$ 81.90	$ 82.25	$ 85.00	$ 82.90	$ 79.09	$ 79.03	$ 86.12
1983	61.30	70.00	73.09	71.00	67.70	70.84	71.75	75.04	77.17	77.97	81.42	89.50	73.90
1982	84.34	82.17	76.84	71.34	62.67	58.04	56.00	55.90	56.17	52.20	51.24	52.59	63.35
1981	98.58	99.50	105.23	101.75	95.42	89.37	90.17	94.63	90.42	81.17	75.63	76.42	91.53
1980	99.67	105.00	101.17	92.25	77.50	69.70	76.08	84.42	94.43	95.91	98.50	101.57	91.35
1979	97.56	110.75	119.75	99.96	97.75	100.83	96.10	90.33	88.08	87.30	92.50	94.10	97.81
1978	70.56	72.08	74.25	76.08	71.90	74.76	77.75	76.33	72.91	74.83	83.41	89.91	76.23
1977	72.17	72.33	73.50	71.92	65.30	61.91	61.25	61.37	58.83	49.10	49.50	60.59	63.15
1976	72.16	78.08	89.03	91.75	83.75	84.50	87.33	79.56	70.41	64.00	63.77	69.17	77.79
1975	78.00	79.25	85.03	86.08	81.75	67.06	58.21	69.58	73.46	62.04	58.50	63.41	71.86

1. Average price of No. 1 heavy melting steel scrap delivered to consumers at Pittsburgh, Philadelphia and Chicago
Source: *Iron Age*

No. 2 bundles composite price[1]—dollars per gross ton

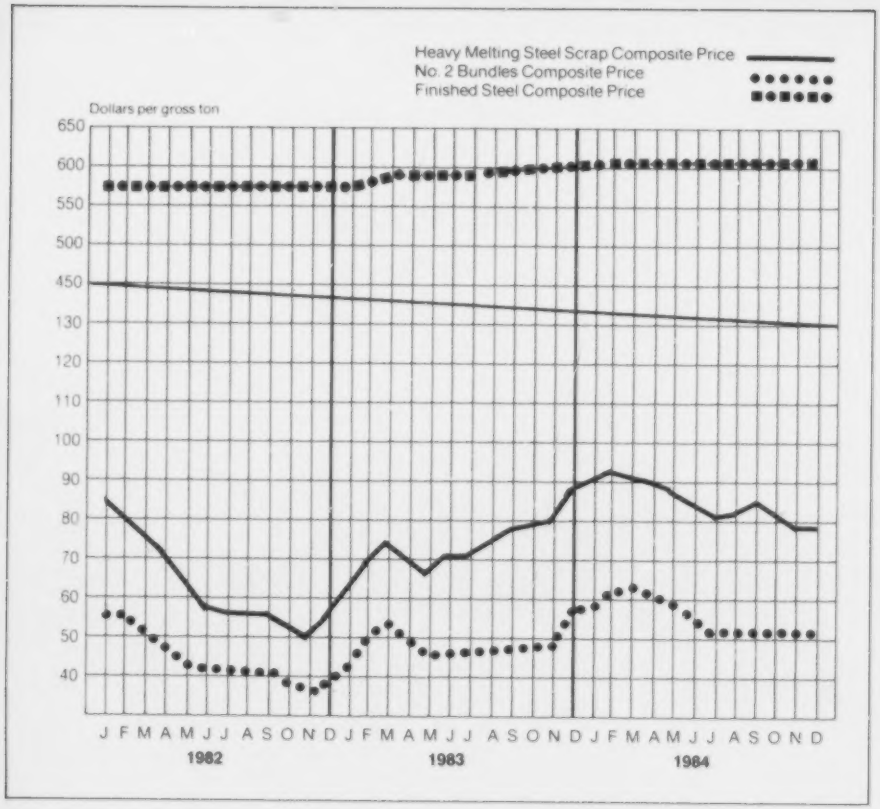
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
1984	$ 59.96	$ 62.50	$ 62.41	$ 61.03	$ 60.16	$ 56.50	$ 51.10	$ 51.16	$ 51.83	$ 51.16	$ 51.09	$ 51.10	$ 55.84
1983	42.84	48.84	51.84	48.84	46.57	46.34	45.75	45.50	46.57	46.57	49.34	58.17	48.80
1982	56.50	56.17	51.24	47.58	44.84	42.84	41.84	41.84	41.17	39.42	38.70	38.50	45.05
1981	71.83	71.83	73.83	75.08	68.08	61.57	61.58	62.50	61.66	56.50	53.43	53.75	64.31
1980	62.50	67.41	65.90	60.83	53.83	50.70	54.00	62.66	67.90	70.91	72.75	75.23	63.71
1979	61.56	68.17	73.25	63.43	65.75	67.50	62.76	58.58	57.41	56.76	58.58	61.03	62.89
1978	47.90	49.25	50.50	51.17	48.50	49.03	51.16	49.75	47.50	47.83	53.66	57.16	50.28
1977	49.30	48.75	50.08	50.25	46.03	42.58	41.83	43.56	41.83	36.10	36.00	43.00	44.11
1976	47.33	52.00	62.30	64.92	62.83	63.43	64.50	56.90	51.00	44.91	44.70	47.66	55.20
1975	46.42	47.00	47.49	49.29	49.16	44.13	40.54	43.58	45.20	42.41	42.00	42.83	45.00

1. Average price of No. 2 bundles delivered to consumers at Pittsburgh, Philadelphia and Chicago
Source: *Iron Age*

Finished steel composite price[1]—cents per pound

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
1984	26.822	26.939	26.939	26.939	27.405	27.405	27.582	27.582	27.582	27.582	27.582	27.582	27.313
1983	25.297	25.978	25.954	25.954	25.954	25.954	25.954	25.954	26.822	26.822	26.822	26.822	26.190
1982	25.195	25.195	25.195	25.297	25.297	25.297	25.297	25.297	25.297	25.297	25.297	25.297	25.271
1981	22.901	23.362	23.598	23.776	23.776	24.232	24.488	24.488	24.488	25.195	25.195	25.195	24.224
1980	20.943	21.038	21.168	21.739	21.739	21.739	21.736	21.736	21.736	21.982	22.019	22.286	21.655
1979	19.549	19.549	19.549	19.606	19.637	19.668	20.253	20.311	20.311	20.547	20.547	20.547	20.006
1978	16.294	17.324	17.393	17.670	17.670	17.670	17.875	18.719	18.719	18.719	18.719	18.719	17.957
1977	15.146	15.146	15.146	15.146	15.146	15.146	15.941	15.941	16.043	16.043	16.043	16.043	15.577
1976	13.693	13.693	13.693	13.693	13.835	14.186	14.502	14.598	14.598	14.598	14.598	14.880	14.213
1975	12.739	12.928	12.928	12.928	12.928	12.920	12.912	12.912	12.961	13.692	13.693	13.693	13.102

1. Weighted index of steel bars, shapes, wire, rails, black pipe, hot and cold rolled sheets and strips
Source: *Iron Age*



The average annual price of No. 1 Heavy Melting Steel Scrap in 1984 was $86.12, a 17% improvement over 1983, but less than annual averages in 1979–81 and well below the historic highs of 1974. During the year the price level deteriorated steadily from a high in February of $94.92 to a low in December of $79.03.

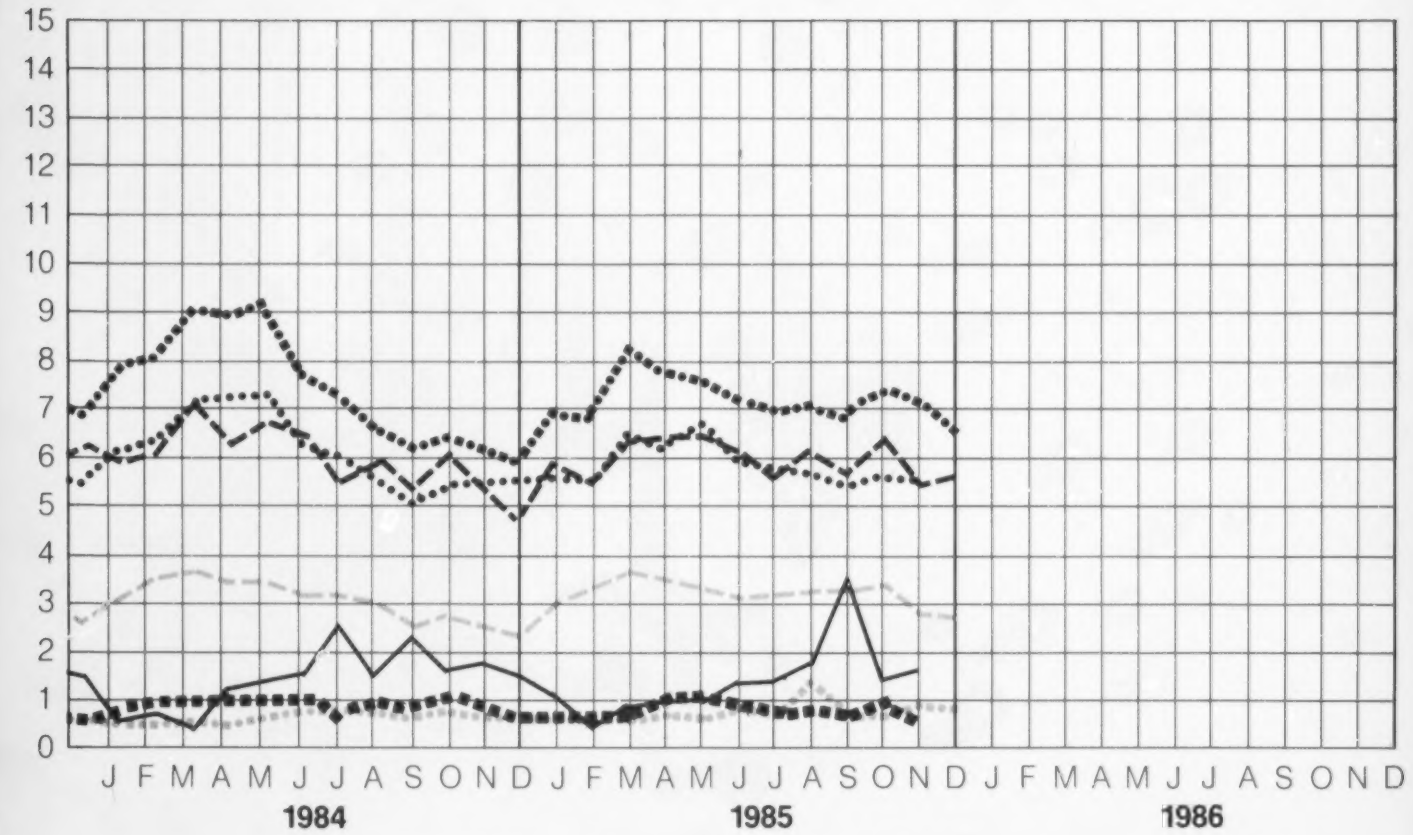
The published finished steel composite price increased 4.3%.

A comparison of charted values for 1982–1984 demonstrates again that the movement in finished steel prices is not influenced by movements in scrap prices.

Scrap composite prices are helpful primarily in reflecting the general movement of scrap prices. The composite for each scrap grade is based on a simple average of prices at Pittsburgh, Philadelphia and Chicago, representing three important cities among some 17 regional U.S. markets for which prices are published. It would be extremely unusual if significant volumes of scrap were purchased at the actual composite price. In the case of months when there are limited or no scrap transactions, the published price may reflect a sense of the market, (or part of the market) were it functioning.

The two scrap price series—No. 1 Heavy Melting Steel Scrap and No. 2 Bundles—include transportation costs to the steel mill or foundry purchasing the material. For example, if the No. 2 Bundle price is $58.33, the freight rate (which could range from $5.00 to $18.00 a ton and up depending upon the total weight and distance involved) must be subtracted to determine the amount received by the processor.

By contrast, the Finished Steel price does not include transportation charges. It is the price of the steel product at the mill and consequently, is not influenced by changes in freight charges.



Ferrous scrap purchased by U.S. steel mills and foundries[1]

Ferrous scrap exported[1]

Iron ore consumed by U.S. steel mills and foundries[1]

Iron ore imported to the U.S. for consumption[1]

Raw steel produced[2]

Steel mill shipments[2]

Foundry castings shipments[3]

1. U.S. Bureau of Mines. 2. American Iron and Steel Institute. 3. U.S. Bureau of the Census.

TS625-1.U4 1986

FACTS

Institute of Scrap Iron and Steel, Inc.
Representing America's Processors
of Metallic Scrap for Recycling
1985 Yearbook • 43rd Edition

The Institute

The Institute of Scrap Iron and Steel, Inc., founded in 1928, is a national association of approximately 1250 firms—predominantly processors and brokers of ferrous and nonferrous scrap. These firms handle, process and/or ship approximately 95 percent of all purchased ferrous scrap consumed in the U.S. or exported. Member companies also include consumers of scrap metals and suppliers to the industry.

A scrap metal processor is defined as one, who, from a fixed location, utilizes machinery and equipment for processing and manufacturing iron, steel or nonferrous metallic scrap into prepared grades and whose principal product is scrap iron, scrap steel or nonferrous metallic scrap for remelting purposes.

Facts
43rd Edition
1985 Yearbook

Copyright © 1986
Institute of Scrap Iron and Steel, Inc.

1627 K Street, N.W.
Washington, DC 20006
202-466-4050

Price: $5.00

Contents

Facts summary 3
Ferrous scrap consumption, purchased scrap receipts and home scrap production 4
Raw steel production, steel mill and foundry castings shipments 5
Trend of U.S. steel production by furnace 5
Purchased scrap receipts, home scrap consumption and ferrous scrap consumption by grade 6
U.S. consumption of ferrous scrap and blast furnace iron (BFI) by type of furnace 6
Iron ore consumption 7
Iron ore imported for consumption .. 7
Iron ore mined domestically 7
U.S. exports of carbon steel and iron scrap 8
U.S. exports of ferrous scrap by country 8
U.S. exports of ferrous scrap by grade 9
U.S. imports of ferrous scrap, iron ore, pig iron and steel products 9
No. 1 heavy melting steel scrap composite price 10
No. 2 bundles composite price 10
Finished steel composite price 10

Note: All tonnage figures are in net (short) tons which equal 2,000 pounds. Scrap price tables are based on gross (long) tons equal to 2,240 pounds.

Monthly figures may not add to annual totals due to rounding or sampling differences.

Publications

"ISIS Handbook Including Specifications for Iron and Steel Scrap" ($7.00)
"Metallic Scrap—The Manufactured Resource"
"Scrap in Iron and Steelmaking"
Phoenix Quarterly: To be placed on the complimentary mailing list to receive the Institute's award winning public interest periodical, write the Institute giving your full address. Recent issues on the following subjects are available:
Design for Recycling
China Seeks Cooperation
Scrap Processing Capacity
Recycling and Hazardous Waste
Steel Industry Adversity
Steel and Scrap in 1985
Ferrous Scrap Backlog
Garbage and Flow Control
Can Steel Get Into Shape
New Players in International Steel
Scrap in Space
Scrap Processing Equipment
Scrap in the Third World
Continuous Cast Steelmaking
"Steel Day"
How the Scrap Market Functions
Recycling America's Railroads
Recycling Automobile Blocks
Industrial Auto Scrap
Sodium Azide and Air Bags

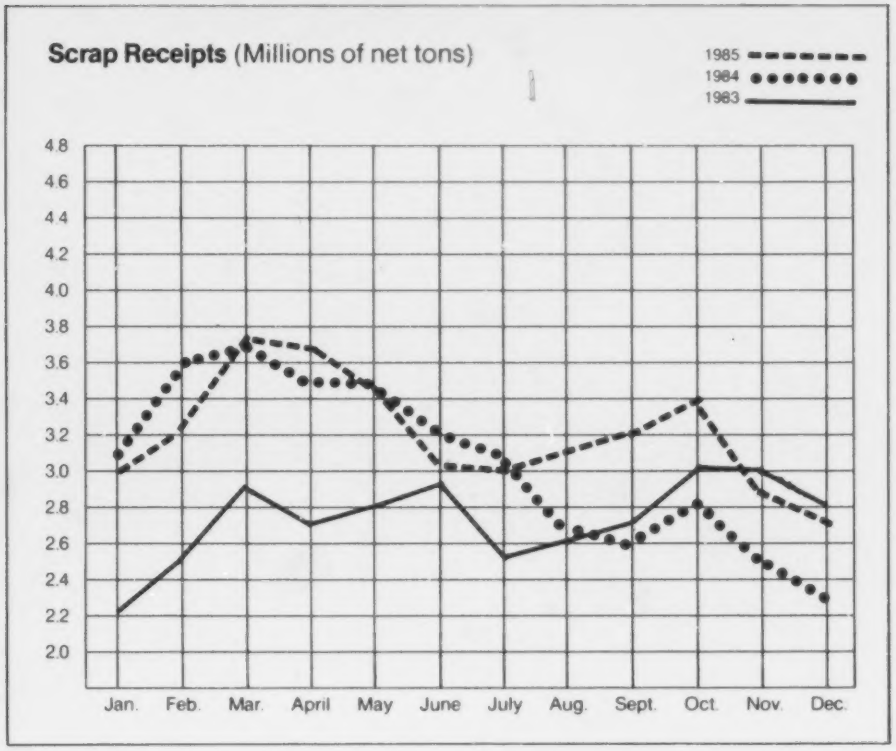
Facts

Summary

		1965	1975	1981	1982	1983	1984	1985
Ferrous Scrap for Recycling Purchased domestically by:[1]	Steel Mills	–	23.5	30.2	19.0	24.8	26.7	27.4*
	Foundries	–	13.3	11.8	9.0	9.4	9.3	11.4*
	Total	**35.8**	**36.8**	**42.0**	**28.0**	**34.2**	**36.1**	**38.8***
Home Scrap Produced in:[1]	Steel Mills	–	40.0	38.4	23.5	23.9	24.7	24.6*
	Foundries	–	6.0	4.8	3.6	3.4	4.6	5.9*
	Total	**55.2**	**46.0**	**43.3**	**27.1**	**27.2**	**29.3**	**30.5***
Purchased & Home Scrap consumed by:[1]	Steel Mills	–	62.8	68.3	43.7	49.0	51.8	53.2*
	Foundries	–	19.5	16.8	12.7	12.8	13.9	17.3*
	Total	**90.4**	**82.3**	**85.1**	**56.4**	**61.8**	**65.7**	**70.5***
Exported (Includes purchased & home)[5]	Carbon	6.17	9.60	6.24	6.56	7.37	9.24	9.61
	Stainless	**	**	0.06	0.13	0.08	0.16	0.18
	Alloy	**	**	0.11	0.11	0.07	0.10	0.13
Prices (Composite, yearly average in dollars per gross ton)[2]	No. 1 Heavy Melting	34.35	70.90	91.53	63.35	73.90	86.12	74.35
	No. 2 Bundles	22.83	44.81	64.31	45.05	48.80	55.84	52.34
Iron Ore[1]	Mined domestically	97.9	88.3	83.2	40.9	42.5	57.4	54.3
	Imported	50.5	52.4	31.7	16.4	14.9	19.2	17.7
	Blast furnace iron consumed	88.9	79.6	75.0	44.4	50.1	53.2	51.4
Ferrous Production	Raw Steel Production[3]	131.5	116.6	120.8	74.6	84.6	91.5	87.3
	Steel Mill Shipments[3]	92.7	80.0	88.5	61.6	67.6	73.0	72.7
	Ferrous Foundries—Castings Shipments[4]	18.8	15.1	14.0	9.5	10.2	11.9	11.0
Finished Steel Composite Price[2] (yearly average, cents-per-pound)		6.368	13.102	24.224	25.271	26.190	27.313	27.582
Steel Production[3] by type of furnace and percent of total output	Basic Oxygen Furnace	22.9	71.8	73.2	45.3	52.1	52.8	51.9
	Percent	**17.4%**	**61.6%**	**60.6%**	**60.7%**	**61.5%**	**57.1%**	**59.5%**
	Electric	13.8	22.7	34.1	23.2	26.6	31.4	29.0
	Percent	**10.5%**	**19.5%**	**28.3%**	**31.1%**	**31.5%**	**33.9%**	**33.2%**
	Open Hearth	94.2	22.2	13.5	6.1	6.0	8.3	6.4
	Percent	**71.7%**	**19.0%**	**11.1%**	**8.2%**	**7.0%**	**9.0%**	**7.3%**
Ferrous Scrap Consumption by Furnace (purchased & home)[1]	Basic Oxygen	7.8	23.4	23.3	14.1	16.2	16.4	15.4
	Blast	5.1	3.9	4.0	2.6	3.1	2.7	2.5
	Cupola	14.8	11.7	9.1	7.3	7.7	8.5	10.2
	Electric	16.7	29.9	39.6	27.8	30.6	33.4	38.9
	Open Hearth	43.7	11.8	7.5	3.6	3.3	3.7	2.4
	Other	2.3	1.6	1.5	1.0	0.9	1.1	1.2

Sources
[1]U.S. Bureau of Mines (in millions of net tons)
[2]*Iron Age*
[3]American Iron & Steel Institute (in millions of net tons)
[4]U.S. Bureau of Census (in millions of net tons)
[5]Pre-1976 U.S. Bureau of Mines; post-1975 U.S. Bureau of Census
*Estimation procedure revised beginning 1985
**Not reported separately; included in carbon

Ferrous scrap consumption, purchased scrap receipts and home scrap production—thousands of net tons



Year	Total U.S. Scrap Consumed	Purchased Scrap Receipts	Home Scrap Production
1976	89,910	41,399	50,025
1977	92,198	41,933	49,517
1978	99,224	46,068	52,082
1979	98,901	46,963	52,219
1980	83,710	40,954	42,207
1981	85,097	41,981	43,260
1982	56,386	27,994	27,127
1983	61,782	34,219	27,247
1984	65,702	36,060	29,276
1985	70,497	38,813	30,463

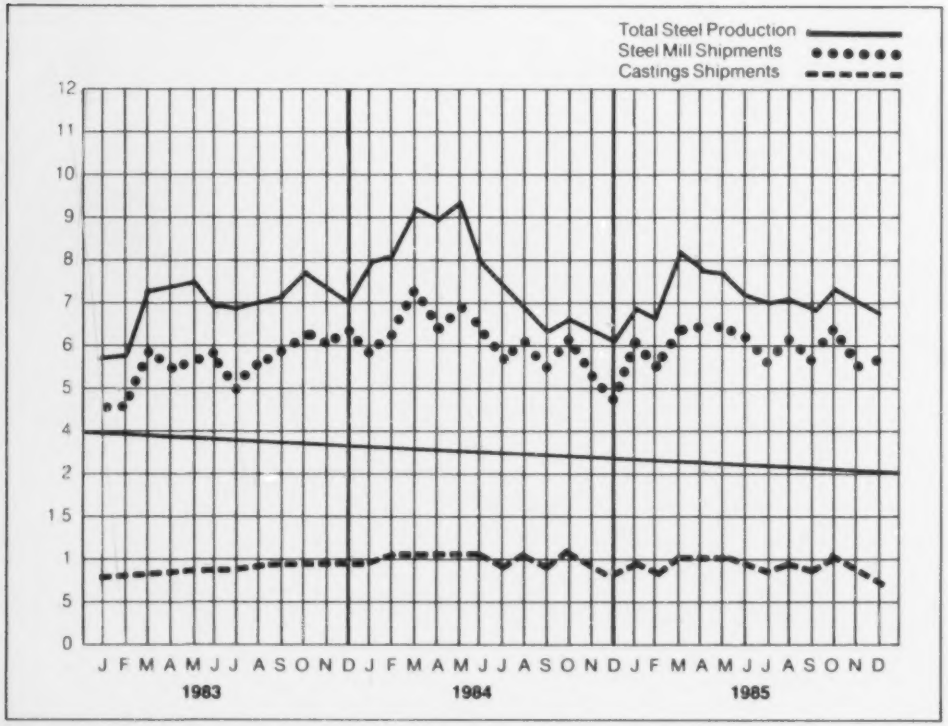
Source: U.S. Bureau of Mines, estimation procedure revised beginning 1985.

Comparability of 1985 data with prior years is limited. Beginning with 1985 data for scrap consumption, receipts and home scrap production, the Bureau of Mines revised its estimating system to account for the lack of data for 40 electric furnace shops. (If the revised system is applied to 1984 scrap consumption, according to the Bureau, the total volume increases by more than 13% to 74.8 million net tons because of revisions to steel mill (9.3%), steel foundry (37.5%) and iron foundry (25.6%) consumption data.) Annual figures for 1985 are preliminary.

Steel production in 1985 slipped nearly 5% while steel mill shipments remained level. Castings shipments dipped 8% compared to the previous year.

Month	Total U.S. Scrap Consumption	Purchased Scrap Receipts	Home Scrap Production
1983			
January	4,257	2,223	1,832
February	4,396	2,488	1,877
March	5,157	2,913	2,395
April	5,029	2,723	2,247
May	5,233	2,817	2,376
June	5,098	2,859	2,286
July	4,775	2,529	2,181
August	5,009	2,620	2,368
September	5,111	2,700	2,409
October	5,545	2,988	2,467
November	5,375	3,008	2,428
December	5,087	2,804	2,247
1984			
January	5,709	3,128	2,442
February	5,932	3,592	2,499
March	6,460	3,730	2,866
April	6,256	3,476	2,734
May	6,393	3,470	2,856
June	5,820	3,157	2,633
July	5,662	3,089	2,510
August	5,143	2,732	2,376
September	4,897	2,615	2,144
October	5,197	2,844	2,323
November	4,662	2,473	2,085
December	4,305	2,268	1,988
1985			
January	5,710	3,025	2,403
February	5,640	3,237	2,349
March	6,382	3,754	2,639
April	6,216	3,670	2,634
May	6,208	3,438	2,665
June	5,779	3,054	2,476
July	5,594	3,014	2,488
August	5,782	3,163	2,629
September	5,817	3,212	2,571
October	6,215	3,400	2,704
November	5,751	2,934	2,582
December	5,371	2,777	2,381

Raw steel production, steel mill and foundry castings shipments—millions of net tons



Trend of U.S. steel production by furnace—millions of net tons and by perecentage[1]

	Basic Oxygen		Electric		Open Hearth	
Year	Tons	%	Tons	%	Tons	%
1976	79.9	62.5%	24.6	19.2%	23.5	18.3%
1977	77.4	61.8%	27.9	22.2%	20.0	16.0%
1978	83.5	60.9%	32.2	23.5%	21.3	15.6%
1979	83.3	61.1%	33.9	24.9%	19.2	14.0%
1980	67.6	60.4%	31.2	27.9%	13.1	11.7%
1981	73.2	60.6%	34.1	28.3%	13.5	11.1%
1982	45.3	60.7%	23.2	31.1%	6.1	8.2%
1983	52.1	61.5%	26.6	31.5%	6.0	7.0%
1984	52.8	57.1%	31.4	33.9%	8.3	9.0%
1985	51.9	59.5%	29.0	33.2%	6.4	7.3%

1. Calculated as a percentage of total steel production.
Source: American Iron and Steel Institute

Year	Total Steel Production	Steel Mill Shipments	Castings Shipments[1]
1976	128.0	89.4	17.8
1977	125.3	91.1	18.5
1978	137.0	97.9	18.8
1979	136.3	100.3	18.2
1980	111.8	83.9	14.1
1981	120.8	88.5	14.0
1982	74.6	61.6	9.5
1983	84.6	67.6	10.2
1984	91.5	73.0	11.9
1985	87.3	72.7	11.0

1. Data sample revised beginning 1975.
Source: for steel data, American Iron and Steel Institute; for castings, U.S. Bureau of the Census

Month	Total Steel Production	Steel Mill Shipments	Castings Shipments[1]
1983			
January	5,570	4,583	707
February	5,676	4,588	726
March	7,127	5,969	763
April	7,292	5,399	790
May	7,412	5,612	847
June	6,993	5,986	849
July	6,921	5,045	894
August	7,020	5,789	969
September	7,134	5,893	938
October	7,692	6,078	925
November	7,263	6,014	903
December	6,991	6,269	969
1984			
January	7,970	5,980	992
February	8,142	6,150	1,001
March	9,056	7,240	1,035
April	8,997	6,472	1,031
May	9,174	6,948	1,112
June	7,945	6,686	1,043
July	7,460	5,820	913
August	6,915	6,033	1,084
September	6,378	5,454	959
October	6,703	6,087	1,125
November	6,422	5,317	910
December	6,013	4,867	732
1985			
January	6,984	6,017	956
February	6,851	5,598	889
March	8,269	6,344	1,001
April	7,872	6,425	1,049
May	7,830	6,519	1,013
June	7,292	6,125	935
July	7,010	5,710	880
August	7,130	6,064	911
September	6,924	5,848	858
October	7,351	6,308	999
November	7,051	5,654	807
December	6,728	5,821	717

Purchased scrap receipts, home scrap production and ferrous scrap consumption by grade—thousands of net tons

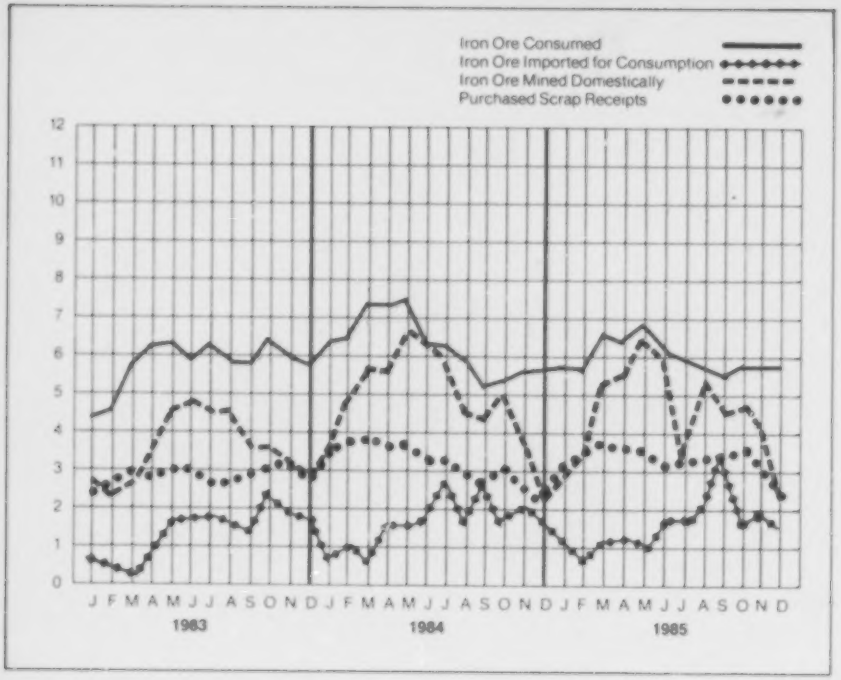
Total—All Types of Manufacturers	1983 Purchased Scrap Receipts[1]	1983 Home Scrap Production	1983 Total Scrap Consumed	1984 Purchased Scrap Receipts[1]	1984 Home Scrap Production	1984 Total Scrap Consumed	1985 Purchased Scrap Receipts[1]	1985 Home Scrap Production	1985 Total Scrap Consumed
GRADE OF SCRAP									
Carbon steel:									
Low-phosphorous plate and punchings	1,261	202	1,434	1,185	440	1,550	1,941	436	2,289
Cut structural and plate	2,132	387	2,549	2,163	470	2,696	2,292	510	2,972
No. 1 heavy melting steel	7,439	8,633	16,083	8,539	8,781	17,386	8,071	8,960	17,181
No. 2 heavy melting steel	2,022	721	2,777	2,198	693	2,894	3,064	920	4,008
No. 1 and electric furnace bundles	5,969	2,054	7,999	6,211	1,930	8,457	5,334	1,657	7,380
No. 2 and all other bundles	1,094	7	1,174	1,226	8	1,257	1,248	42	1,346
Electric furnace 1 foot and under (not bundles)	239	17	249	118	5	119	161	32	186
Railroad rails	257	15	340	227	8	369	292	9	348
Turnings and borings	895	157	1,107	1,187	186	1,402	1,262	295	1,575
Slag scrap (Fe content 70%)	603	2,671	3,097	445	3,932	3,292	350	2,475	2,826
Shredded or fragmentized	3,047	51	3,137	4,096	32	4,248	4,787	182	5,112
No. 1 busheling	1,685	215	1,974	1,620	213	1,916	1,826	325	2,236
All other carbon steel scrap	2,214	6,071	8,283	1,995	6,264	8,022	2,422	6,629	9,157
Stainless steel scrap	480	523	1,005	549	491	1,058	622	562	1,194
Alloy steel (except stainless)	180	1,000	1,252	283	1,158	1,454	321	1,306	1,672
Ingot mold scrap	271	1,520	1,837	390	1,537	1,828	267	1,435	1,734
Machinery and cupola cast iron	808	253	992	830	379	1,162	858	269	1,146
Cast iron borings	906	167	1,165	1,060	178	1,202	1,360	123	1,474
Motor blocks	811	364	1,097	386	711	1,107	470	829	1,308
Other iron scrap	810	1,408	2,275	724	2,460	3,296	956	3,029	4,021
Other scrap	1,097	809	1,957	578	398	986	773	498	1,302
Total scrap[2]	**34,219**	**27,247**	**61,782**	**36,060**	**29,276**	**65,702**	**38,813**	**30,463**	**70,497**

1 Receipts less shipments
2 Data may not add to totals because of sampling differences; estimation procedure revised beginning 1985
Source: U.S. Bureau of Mines

U.S. consumption of ferrous scrap and blast furnace iron (BFI) by type of furnace—thousands of net tons

Year	Basic Oxygen Scrap	Basic Oxygen BFI	Blast Scrap	Cupola Scrap	Cupola BFI	Electric Scrap	Electric BFI	Open Hearth Scrap	Open Hearth BFI	Other Scrap	Other BFI	Total Consumed[1] Scrap	Total Consumed[1] BFI
1976	26,204	66,138	3,692	13,341	1,197	32,301	638	12,337	15,410	2,035	3,661	89,910	87,045
1977	25,034	63,877	3,771	14,325	1,241	36,414	993	11,087	12,531	1,567	3,361	92,198	82,003
1978	26,006	69,028	4,185	14,077	1,056	41,289	1,440	11,768	13,444	1,899	3,453	99,224	88,420
1979	26,496	68,526	4,117	12,774	1,026	43,555	905	10,478	12,865	1,481	4,135	98,901	87,457
1980	21,859	56,414	3,651	9,440	698	40,154	855	7,445	8,606	1,160	2,481	83,710	69,053
1981	23,278	62,162	4,046	9,113	685	39,642	583	7,498	8,867	1,520	2,743	85,097	75,040
1982	14,059	38,553	2,648	7,328	481	27,794	496	3,588	3,635	970	141	56,386	44,409
1983	16,219	44,330	3,125	7,655	425	30,619	341	3,275	3,918	888	1,056	61,782	50,070
1984	16,447	45,551	2,724	8,460	469	33,405	370	3,724	5,718	1,094	92	65,702	53,202
1985	15,357	44,400	2,480	10,156	511	38,910	611	2,410	4,761	1,154	1,154	70,497	51,437

1. Data may not add to totals because of sampling differences; estimation procedure revised beginning 1985.
Source: U.S. Bureau of Mines



Iron Ore Consumption—Millions of net tons

Month	1983	1984	1985
January	4.3	6.2	5.6
February	4.5	6.4	5.6
March	5.8	7.2	6.6
April	6.1	7.2	6.3
May	6.2	7.3	6.8
June	5.9	6.3	6.1
July	6.1	6.2	5.9
August	5.9	5.8	5.8
September	5.8	5.1	5.5
October	6.3	5.3	5.7
November	5.9	5.5	5.7
December	5.7	5.5	5.7

Source: U.S. Bureau of Mines

Iron Ore Imported for Consumption—Millions of net tons

Month	1983	1984	1985
January	0.5	0.7	1.2
February	0.4	0.9	0.6
March	0.2	0.5	1.0
April	0.6	1.4	1.1
May	1.4	1.6	1.0
June	1.6	1.8	1.5
July	1.7	2.8	1.5
August	1.6	1.7	1.9
September	1.2	2.5	3.3
October	2.2	1.7	1.5
November	1.8	1.9	1.7
December	1.7	1.7	1.4

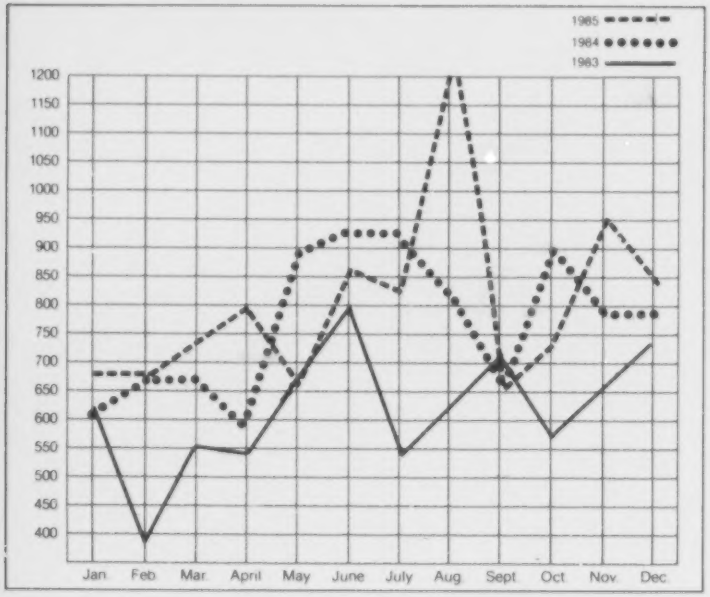
Source: U.S. Bureau of Mines

Iron Ore Mined Domestically—Millions of net tons

Month	1983	1984	1985
January	2.8	3.5	2.8
February	2.2	4.8	3.4
March	2.6	5.5	5.2
April	3.5	5.5	5.5
May	4.5	6.4	6.4
June	4.8	6.2	5.9
July	4.5	5.8	3.3
August	4.5	4.5	5.5
September	3.6	4.4	4.6
October	3.6	5.0	4.7
November	3.1	3.7	4.2
December	2.9	2.2	2.6

Source: U.S. Bureau of Mines

U.S. exports of carbon steel and iron scrap—thousands of net tons



U.S. Exports of Carbon Steel and Iron Scrap
Thousands of net tons

Month	1983	1984	1985
January	615	611	673
February	360	654	670
March	550	659	734
April	544	589	797
May	666	884	667
June	790	935	862
July	548	935	826
August	614	829	1,206
September	713	676	652
October	566	889	738
November	658	785	947
December	745	786	840

Source: U.S. Department of Commerce

U.S. exports of ferrous scrap[1] by country[2]—thousands of net tons

Country	1981	1982	1983	1984	1985
Canada	737	289	539	779	446
Mexico	897	372	419	484	595
China	–	1	1	200	387
Greece	271	208	112	125	184
India	335	415	278	201	610
Italy	34	12	65	306	307
Japan	1,191	1,448	2,600	2,680	2,102
Korean Rep	1,241	1,491	1,476	1,833	1,978
Spain	434	855	356	608	867
Taiwan	374	313	493	405	414
Turkey	364	639	700	807	955
Venezuela	55	45	20	392	470

1. Includes all grades.
2. Canada and Mexico plus ten largest importing countries in current year; dash means separate total not available.

Source: U.S. Department of Commerce

U.S. exports of ferrous scrap by grade—thousands of net tons

Grade	1981	1982	1983	1984	1985
Alloy steel scrap	108	110	70	100	133
Stainless steel scrap	63	131	80	164	180
No. 1 heavy melting scrap	1,606	1,883	1,895	2,512	2,767
No. 2 heavy melting scrap	618	626	720	879	777
No. 1 baled steel scrap	41	115	206	77	189
No. 2 baled steel scrap	273	181	220	286	290
Shredded steel scrap	1,923	2,023	2,029	2,775	2,559
Borings, shovelings and turnings	486	577	532	800	861
Other steel scrap[1]	796	768	1,445	1,316	1,070
Cut plate and structural[2]	–	–	–	–	434
Iron scrap	501	389	322	590	666
Iron and steel scrap	6,244	6,563	7,369	9,235	9,612

1. Includes terneplate and tinplate.
2. Not reported separately prior to 1985.
Source: U.S. Department of Commerce

A modest 4% gain in carbon steel scrap export volume to 9.6 million net tons brought 1985 shipments to within 12% of 1980's healthier performance. Alloy scrap exports rose by one-third to 133,000 net tons and stainless steel scrap exports increased nearly 10%.

Carbon steel scrap hit a record high of 1,206,000 net tons exported in August. The monthly export average was 800,000 net tons.

Japan remained the leading purchaser of American ferrous scrap. In order of magnitude, Korea, Turkey, Spain and India complete the list of the five largest importing nations.

U.S. imports of ferrous scrap, iron ore, pig iron and steel products—millions of net tons

Year	Scrap[1]	Iron Ore	Pig Iron	Steel
1976	0.5	49.7	0.4	15.0
1977	0.6	42.5	0.4	19.9
1978	0.8	37.6	0.7	22.0
1979	0.8	37.8	0.5	17.5
1980	0.6	28.1	0.5	15.5
1981	0.6	31.7	0.5	19.9
1982	0.5	16.4	0.3	16.7
1983	0.6	14.9	0.2	17.1
1984	0.6	19.2	0.7	26.2
1985	0.6	17.7	0.3	24.3

1. Includes tinplate.
Source: U.S. Bureau of Mines, for steel; American Iron and Steel Institute

No. 1 heavy melting steel scrap composite price[1]—dollars per gross ton

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
1985	$ 81.00	$ 83.15	$ 86.75	$78.70	$70.50	$ 66.34	$ 68.97	$ 74.17	$ 72.43	$ 71.17	$ 68.83	$70.23	$74.35
1984	92.70	94.92	91.25	90.17	89.08	85.17	81.90	82.25	85.00	82.90	79.09	79.03	86.12
1983	61.30	70.00	73.09	71.00	67.70	70.84	71.75	75.04	77.17	77.97	81.42	89.50	73.90
1982	84.34	82.17	76.84	71.34	62.67	58.04	56.00	55.90	56.17	52.20	51.24	52.59	63.35
1981	98.58	99.50	105.23	101.75	95.42	89.37	90.17	94.63	90.42	81.17	75.63	76.42	91.53
1980	99.67	105.00	101.17	92.25	77.50	69.70	76.08	84.42	94.43	95.91	98.50	101.57	91.35
1979	97.56	110.75	119.75	99.96	97.75	100.83	96.10	90.33	88.08	87.30	92.50	94.10	97.81
1978	70.56	72.08	74.25	76.08	71.90	74.76	77.75	76.33	72.91	74.83	83.41	89.91	76.23
1977	72.17	72.33	73.50	71.92	65.30	61.91	61.25	61.37	58.83	49.10	49.50	60.59	63.15
1976	72.16	78.08	89.03	91.75	83.75	84.50	87.33	79.56	70.41	64.00	63.77	69.17	77.79

1. Average price of No. 1 heavy melting steel scrap delivered to consumers at Pittsburgh, Philadelphia and Chicago.
Source: *Iron Age*

No. 2 bundles composite price[1]—dollars per gross ton

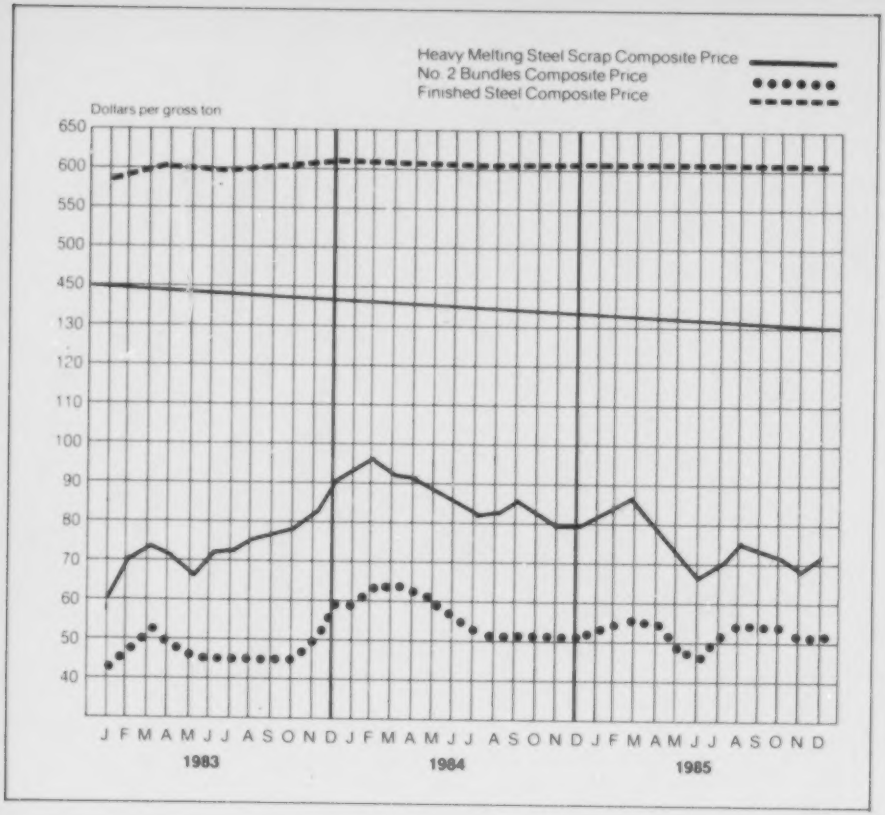
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
1985	$ 53.00	$ 55.25	$ 57.50	$ 55.24	$ 49.51	$ 47.17	$ 50.04	$ 53.83	$ 53.04	$ 52.25	$ 50.67	$ 50.63	$ 52.34
1984	59.96	62.50	62.41	61.03	60.16	56.50	51.10	51.16	51.83	51.16	51.09	51.10	55.84
1983	42.84	48.84	51.84	48.84	46.57	46.34	45.75	45.50	46.57	46.57	49.34	58.17	48.80
1982	56.50	56.17	51.24	47.58	44.84	42.84	41.84	41.84	41.17	39.42	38.70	38.50	45.05
1981	71.83	71.83	73.83	75.08	68.08	61.57	61.58	62.50	61.66	56.50	53.43	53.75	64.31
1980	62.50	67.41	65.90	60.83	53.83	50.70	54.00	62.66	67.90	70.91	72.75	75.23	63.71
1979	61.56	68.17	73.25	63.43	65.75	67.50	62.76	58.58	57.41	56.76	58.58	61.03	62.89
1978	47.90	49.25	50.50	51.17	48.50	49.03	51.16	49.75	47.50	47.83	53.66	57.16	50.28
1977	49.30	48.75	50.08	50.25	46.03	42.58	41.83	43.56	41.83	36.10	36.00	43.00	44.11
1976	47.33	52.00	62.30	64.92	62.83	63.43	64.50	56.90	51.00	44.91	44.70	47.66	55.20

1. Average price of No. 2 bundles delivered to consumers at Pittsburgh, Philadelphia and Chicago.
Source: *Iron Age*

Finished steel composite price[1]—cents per pound

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
1985	27.582	27.582	27.582	27.582	27.582	27.582	27.582	27.582	27.582	27.582	27.582	27.582	27.582
1984	26.822	26.939	26.939	26.939	27.405	27.405	27.582	27.582	27.582	27.582	27.582	27.582	27.313
1983	25.297	25.978	25.954	25.954	25.954	25.954	25.954	25.954	26.822	26.822	26.822	26.822	26.190
1982	25.195	25.195	25.195	25.297	25.297	25.297	25.297	25.297	25.297	25.297	25.297	25.297	25.271
1981	22.901	23.362	23.598	23.776	23.776	24.232	24.488	24.488	24.488	25.195	25.195	25.195	24.224
1980	20.943	21.038	21.168	21.739	21.739	21.739	21.736	21.736	21.736	21.982	22.019	22.286	21.655
1979	19.549	19.549	19.549	19.606	19.637	19.668	20.253	20.311	20.311	20.547	20.547	20.547	20.006
1978	16.294	17.324	17.393	17.670	17.670	17.670	17.875	18.719	18.719	18.719	18.719	18.719	17.957
1977	15.146	15.146	15.146	15.146	15.146	15.146	15.941	15.941	16.043	16.043	16.043	16.043	15.577
1976	13.693	13.693	13.693	13.693	13.835	14.186	14.502	14.598	14.598	14.598	14.598	14.880	14.213

1. Weighted index of steel bars, shapes, wire, rails, black pipe, hot and cold rolled sheets and strips.
Source: *Iron Age*



Despite a slight improvement in the quantity of purchased scrap, the annual average price of No. 1 Heavy Melting Steel Scrap in 1985 was $74.35, a 14% drop compared to 1984 and 31% below the historic high of $108.51 in 1974. The year's high of $86.75 occurred in March and the low of $66.34, in June.

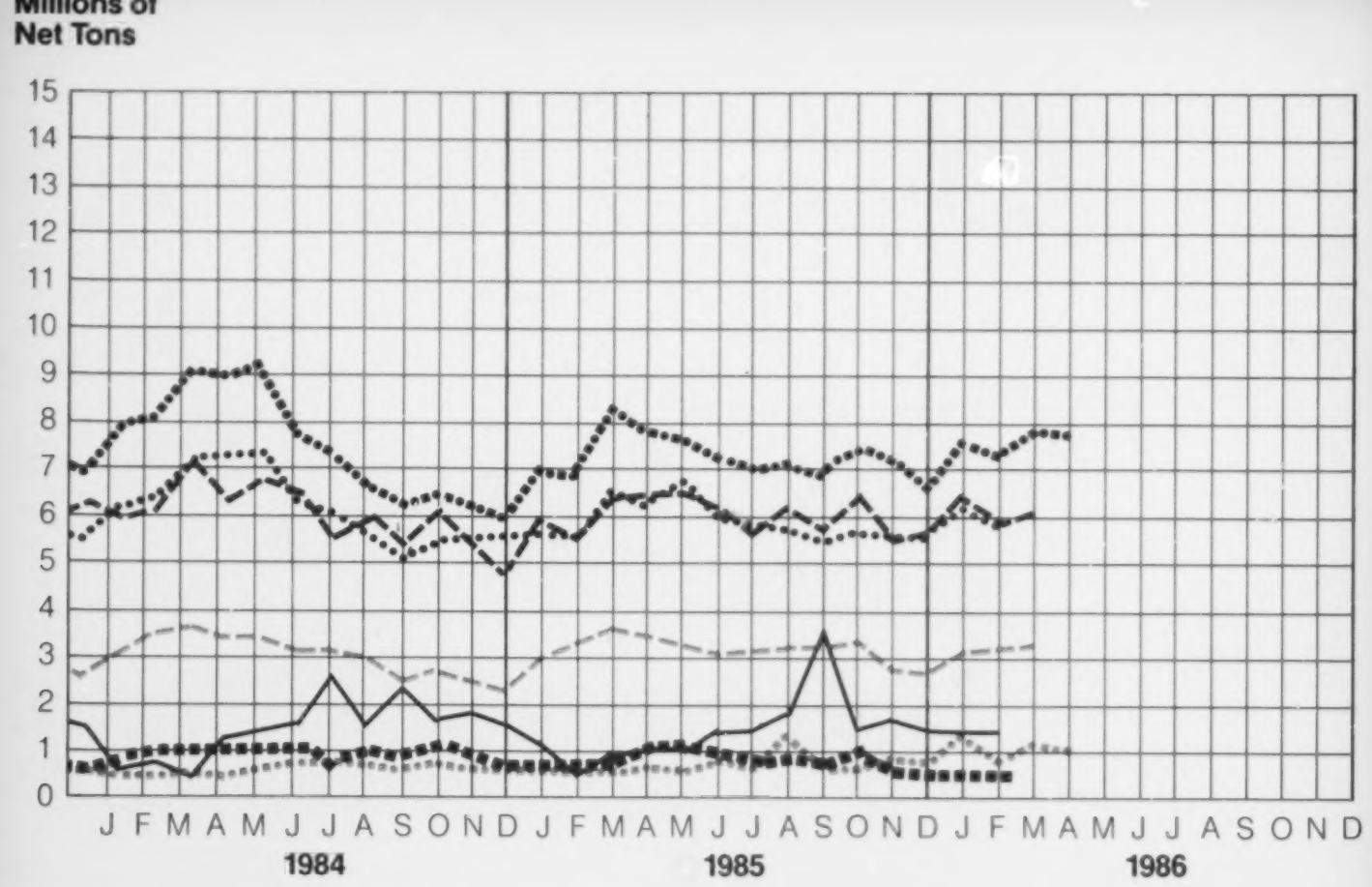
The published finished steel composite price remained level.

A comparison of charted values for 1983–1985 demonstrates again that the movement in finished steel prices is not influenced by movements in scrap prices.

Scrap composite prices are helpful primarily in reflecting the general movement of scrap prices. The composite for each scrap grade is based on a simple average of prices at Pittsburgh, Philadelphia and Chicago, representing three important cities among some 17 regional U.S. markets for which prices are published. It would be extremely unusual if significant volumes of scrap were purchased at the actual composite price. In the case of months when there are limited or no scrap transactions, the published price may reflect a sense of the market, (or part of the market) were it functioning.

The two scrap price series—No. 1 Heavy Melting Steel Scrap and No. 2 Bundles—include transportation costs to the steel mill or foundry purchasing the material. For example, if the No. 2 Bundle price is $52.34, the freight rate (which could range from $5.00 to $18.00 a ton and up depending upon the total weight and distance involved) must be subtracted to determine the amount received by the processor.

By contrast, the Finished Steel price does not include transportation charges. It is the price of the steel product at the mill and consequently, is not influenced by changes in freight charges.



Ferrous scrap purchased by U.S. steel mills and foundries[1]

Ferrous scrap exported[1]

Iron ore consumed by U.S. steel mills and foundries[1]

Iron ore imported to the U.S. for consumption[1]

Raw steel produced[2]

Steel mill shipments[2]

Foundry castings shipments[3]

1. U.S. Bureau of Mines 2. American Iron and Steel Institute 3. U.S. Bureau of the Census